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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/760,213      | 01/12/2001  | Magnus Malmqvist     | 740073.404C1        | 2678             |

500 7590 09/08/2004

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EXAMINER

CROSS, LATOYA I

ART UNIT PAPER NUMBER

1743

DATE MAILED: 09/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                 |                  |  |
|------------------------------|-----------------|------------------|--|
| <b>Office Action Summary</b> | Application No. | Applicant(s)     |  |
|                              | 09/760,213      | MALMQVIST ET AL. |  |
|                              | Examiner        | Art Unit         |  |
|                              | LaToya I. Cross | 1743             |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 June 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16, 19, 20 and 45-49 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10, 19, 20 and 45-49 is/are rejected.
- 7) ☒ Claim(s) 11-16 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

Art Unit: 1743

### DETAILED ACTION

This Office Action is in response to Applicants' amendments filed on June 1, 2004.

Claims 1-16, 19, 20 and 45-49 are pending.

#### *Withdrawal of Rejections from Previous Office Action*

- The anticipatory and obviousness rejections over Oroszlan et al are withdrawn in view of Applicants' argument that Oroszlan et al fail to teach sensitizing the surface of a flow cell by laminar flow of a sensitizing fluid.

#### *Double Patenting*

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 2 of U.S. Patent No. 6,200,814 in view of WO 96/35940 to Neuschafer. The claims of the instant invention differ from those of the '814 patent only in that the instant invention requires that the sensitization of the sensing area be done by flowing a sensitizing fluid across the sensing area. Neuschafer teaches that

Art Unit: 1743

sensitization of a sensing area in a flow cell can be provided by flowing a laminar flow of specific binding partners across the surface and immobilizing the specific binding partner on the sensing surface (page 18, line 22). Thus, instant claim 1 is an obvious variant of claims 1 and 2 in the '814 patent.

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-10, 19, 20 and 45-49 are rejected under 35 U.S.C. 102(b) as being anticipated by WO 96/35940 to Neuschafer et al.

Neuschafer et al teach a sensor platform having immobilized on the surface one or more specific binding partners. The specific bind partners are immobilized on the sensor platform fluidly by laminar flow over gold colloids present on the surface (page 18, line 21 – page 19, line 5). The immobilization of the binding partners to the surface sensitizes the surface and allows the surface to be ready to interact with analytes in a sample for detection. In example B2, the reference shows four channels having sample solution and one channel having only antibody (second reference fluid). With respect to the fourth fluid (claims 45-49), Neuschafer et al teach that the sample fluid may be diluted with an added solvent, such as water or buffer (page 24, lines 5-25). With respect to flow rates of the sensor, the reference teaches that providing a suitable flow rate allows the binding or desorption of bound affinity partners to be followed in real time (page 26, lines 8-15 and page 29, lines 25-31). At page 20, line 22,

Art Unit: 1743

Neuschafer et al teach assaying wherein one or more solutions having binding partners for the binding partners immobilized on the surface are passed over the surface. The analytes are detected by observing a luminescent signal or a change in luminescent signals. Neuschafer et al further teach parallel determination of one or more analytes wherein more than one liquid samples may be contacted with the more than one sensitized area on the surface (page 23, lines 10-17). At page 24, lines 5-16, the reference teaches bringing the sensor platform into contact with more than one sample solution. Further one sample solution may be tested for several analytes simultaneously on one sensor platform.

*Allowable Subject Matter*

3. Claims 11-16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The prior art of record fails to teach or suggest providing a first sensitizing fluid on a sensing surface and a second sensitizing fluid in traverse direction of the first to yield an overlapping sensitized area. Further, two different second sensitizing fluids in traverse direction of the first is not taught or suggested.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to LaToya I. Cross whose telephone number is 571-272-1256. The examiner can normally be reached on Monday-Friday 8:30 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill A. Warden can be reached on 571-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1743

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Jill Warden  
Supervisory Patent Examiner  
Technology Center 1700